Chapter 2
Adolescent Mental Health and Culturally Responsive Pediatric Care

V. Faye Jones, Katie F. Leslie, and Lisa M. Hooper

Introduction

According to 2021 US Census Bureau estimates, there were approximately over 43,000,000 youth aged 10–19 in the United States, accounting for more than 13% of the total US population [1]. The growing diversity in racial and ethnic groups in the nation has been more pronounced in the child population than in the adult population with this trend projected to continue through 2060 [2]. It had been estimated that when the 2020 Census was conducted, more than half of the nation's children would be part of a minority race or ethnic group. What is even more striking is the projection by 2060 estimates that just 36% of all children under the age of 18 will be single-race non-Hispanic White, compared with 52% today [1, 2]. Consequently, there is an urgent need to infuse culture (e.g., language, race, and religion) into health assessment, prevention, intervention, and treatment models. Providers and others in the healthcare field must be aware of the demographic and cultural identities represented in the patient and community population (e.g., low-resourced, rural, bilingual, and severe poverty) they serve.

V. F. Jones
Department of Pediatrics, University of Louisville School of Medicine, Louisville, KY, USA
e-mail: Vfjone01@louisville.edu

K. F. Leslie
Sullivan University College of Pharmacy and Health Sciences, Louisville, KY, USA
e-mail: KLeslie@sullivan.edu

L. M. Hooper (✉)
Center for Educational Transformation, University of Northern Iowa, Cedar Falls, IA, USA
e-mail: lisa.hooper@uni.edu

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Toward this end, and contrary to previous trends in population expansion, a significant amount of this growth occurs outside the typical urban core counties of metropolitan areas [3]. Additionally, the percentage of adolescents living in low-income families has increased to 40% in 2014 compared to 35% in 2008, with 19% living below the poverty line [4]. Racial minority populations are affected more than majority populations with 60% of Black adolescents and 59% of Hispanic adolescents living in low-incomes families, with 33% of Black youth and 28% of Hispanic youth identified as living in poor families. This compares with only 27% of White adolescents living in low-income families, with 11% living in poor families [4]. In addition, 52% of adolescents of immigrant parents compared to 36% of adolescents of native-born parents live in low-income families [4]. These factors and others contribute to the continually changing patient profile about which providers and others in the healthcare field must have the knowledge, skills, and competencies that underpin culturally responsive pediatric care. The changing demographics in the United States will continue to have a major impact on the delivery of healthcare and public health initiatives. As the population continues to diversify, the nation will continue to see the impact on mental and medical health disparities and its effect on the families and communities being served.

As previously mentioned, the adolescent population is an important demographic on which this chapter focuses. In addition, given the unique developmental needs of adolescents, we consider the extent to which this life stage places adolescents in a particular vulnerable state as they experience physical changes, emotional stress, and ecological and contextual experiences (family, school, and community). The adolescent health literature suggests these factors are additive and intersect and thus they all ought to be considered in how mental health issues emerge and thus are assessed, diagnosed, and treated (see [5]). Providers and others in the healthcare field must be prepared to use ecologically valid interventions and culturally tailor other interventions (i.e., evidence-based) that appear to be efficacious and effective with White, middle-class youth but have yet to be tested and evaluated with racial and ethnic minority populations [6–8]. Health disparities have long existed but *may* be ameliorated or reduced if cultural adaptations are considered in pediatric mental health care [9].

Adolescence is described as a transitional stage between childhood and adulthood. It marks a time of significant physical and psychological changes, as well as cognitive growth. Adolescence is shaped by three phases of development: early, middle, and late adolescence. Changes are variable from individual to individual but usually begin and end around the second decade of life. Genetics, gender, race, and ethnicity contribute to and intersect with the timing of puberty but other factors, such as nutritional and environmental exposures from lived experiences impact development as well. All societies recognize this progression; however, the manner in which it is defined, acknowledged, and in some cases celebrated differs among cultural groups and societal expectations [10].

Biological Implications of Adolescence

The biological changes that are evidenced in adolescence are important. Typically, when one thinks of adolescence it is the physical changes that are seen; however, hormonal changes need to occur prior to the emergence of these observable physical changes. The function of the hypothalamus and the adrenal glands in hormonal regulation are critical for the physical expressions of puberty to be observed and referred to as gonadarche and adrenarche, respectively [11]. The hypothalamic-pituitary-gonadal axis controlling the hypothalamus gonadostat regulation is hypersensitive to low-dose sex steroid (androgens and estrogens) in childhood resulting in gonadotropin-releasing hormone (GnRH) suppression. This feedback loop prevents the release of luteinizing hormone (LH) and follicle-stimulating hormone (FSH). At the end of childhood, there is a change in the feedback sensitivity resulting in an escalation of GnRH. As the GnRH level surges, the pituitary gland increases the release of LH and FSH. As a consequence of their rise in concentration, sex steroids surge, either testosterone or estradiol, depending on the gender of the adolescent resulting in the physical changes of puberty. In males, LH promotes testosterone production. Sperm maturation occurs secondary to an increase in FSH. In females, an increase in both LH and FSH is needed for the ovaries to produce estrogen, progesterone, and small amounts of testosterone [11].

Although independent of the hypothalamic-pituitary-gonadal axis, the adrenal gland also increases the production of the adrenal androgens of dehydroepiandrosterone (DHA), dehydroepiandrosterone-sulfate (DHEA-S), and androstenedione [12]. These hormones are responsible for adult body odor, development of axillary and pubic hair, increased testicular size, and early changes in body growth [11, 12]. Hormonal activity occurs prior to the observable physical changes [11, 12]. Other hormones that play a role in puberty development include thyroid hormone, cortisol, glucagon, growth hormone and somatomedins and leptin [13, 14].

Developmental Implications of Adolescence

Equally important during adolescence are the psychosocial and cognitive developmental aspects that are observed. Developmental theorists have attempted to explain the psychosocial and cognitive development evidenced in adolescents [15–18]. The three stages of adolescent development—early, middle, and late—incorporate aspects of these theories to underscore the process the majority of adolescents experience on their pathway to adulthood. The following discussion considers the main features of these stages. However, it should be understood a distinct separation of the stages is not possible. Instead, there is frequent overlap and moving in and out of these phases throughout the progression to maturity and adulthood.

Early adolescence begins at approximately 10 years of age and ends around 13 years of age (i.e., the middle school years). This stage is underscored by the beginning of the physical and biological changes that were discussed earlier. The adolescent is concerned about self. They care about acceptance and belonging. Borrowing from the work of Barrett [19], this stage can be summarized in the question, "Am I normal?" Adolescents begin more complex processing, going from concrete thinking to more abstract thinking, although they are more focused on self and the present. During this stage, a moral compass is beginning to emerge with questions and challenges toward authority figures [19]. The adolescent may engage in limit testing, which may lead to experimentation with drugs and alcohol or other risky behaviors [20].

The hallmark of *middle adolescence* is the development of one's identity [19]. The adolescent is able to understand him/herself separate from others and discovers or clarifies: "What makes him/her unique?" [19]. The adolescent's self-esteem may be connected to their ability to recognize their own strengths and talents and may alternate between having high expectations for themselves compared to a feeling of failure in endeavors setting up an internal conflict [20]. Body image may be a primary focus coupled with a concern about appearance, including sexual attractiveness [20]. Conflicts with parents may increase with the adolescent placing lower importance on parents while elevating the importance of peer groups [20]. Additionally, during this period, abstract thinking predominates, which enhances the adolescent's ability to think about the meaning of life and set goals [19]. Intellectual interests tend to increase, which may set up inner conflicts related to academic abilities and performance [20]. In middle adolescence, the focus continues to be on self. The completion of physical development typically occurs during the next stage, late adolescence [21].

L*ate adolescence*, the period of late high school/college, involves individuals planning for the future beyond their immediate environment. Adolescents are able to use abstract reasoning as they reflect on their own ideas and experiences. They have the capacity to appreciate humor, to make decisions independent of others and to compromise on issues [19, 20]. Also, this stage is marked by an ability to delay gratification. Late adolescence also is a stage where the adolescent may develop a feeling of worthiness because they are capable of living up to a moral code of right and wrong and proficient in the acceptance of social and cultural norms. Changes in this stage include heightened self-esteem, sexual maturity, planning for the future, and how to affect change [19, 20].

The intersection of biological and developmental states and identities taken together creates vulnerabilities for mental health conditions. As stated previously, adolescence is a period of significant changes resulting in the brain establishing more complex neural pathways and behavioral patterns that will last into adulthood [22]. It also is a time of increased stress associated with these changes and the adolescent attempting to navigate the expected developmental tasks creating an environment of increased risk for mental health concerns [23]. A confounding factor is

the role of culture and how it intersects with biological and developmental states. Relevant cultural factors, which may be the adolescence's, their family, or both, and the adolescent's self-reported cultural identities may be implicated in how the adolescent copes with and reacts to stress. The interaction of culture can often support the well-being of the adolescent or inhibit coping to everyday and culturally relevant stressors, which places the adolescent at risk for the development of mental health disorders [23].

Cultural Implications of Adolescence

While a number of factors influence the development, diagnosis, and management of adolescent mental health disorders in the general population, certain population groups face additional mental health issues and healthcare disparities. A study by Lu reported higher rates of depression for females and older adolescents [24]. Additionally, research has shown that racial and ethnic minority adolescents are less likely to be diagnosed, seek out, and/or use mental health services [24–26]. The next section considers several vulnerable racial, ethnic, and cultural minority populations.

Socioeconomic Status

A social factor, such as family income, is a significant predictor of mental health status in children and adolescents [27–29]. In 2015, 20% of all children under 18 years of age were living in poverty defined as annual income of $24,300 for a family of four [30, 31] with 19% of adolescents ages 12 through 17 years living in poor families [4]. Forty-two percent of all children were living in low-income families, defined as 200% or less of the poverty threshold. This compares to 40% of the adolescent population [4]. The combined effects of socioeconomic status and race are clear. Disparities by race and ethnicity do exist affecting minority populations to a greater extent than majority populations [4, 29, 31]. Looking only at the adolescent population, 60% of Black adolescents and 59% of Hispanic adolescents live in low-income families. This compares with only 27% of White adolescents. Furthermore, 52% of adolescents of immigrant parents compared to 36% of adolescents of native-born parents live in low-income families [4].

The effects of poverty are complex and can have lasting effects throughout the lifespan. Two hypotheses have been proposed to account for the association between socioeconomic status and psychological problems: (a) the social causation hypothesis and (b) the social selection hypothesis [32, 33]. The social causation hypothesis postulates that psychological problems develop secondary to the adversity that the

individual lives in daily. The social selection hypothesis suggests persons who have psychological concerns gradually decrease their level of income secondary to their disease creating barriers for the individual to fulfill their obligations in the expected role subsequently creating more stress creating a snowballing effect [32, 33]. These hypotheses facilitate our understanding of the many dynamics that impact the mental health status of adolescents. Low socioeconomic status often results in poor living and neighborhood conditions that often expose children to violence [27]. Other issues, including food insecurity, family mental health issues, educational opportunities, and available community resources, may contribute to the presentation and willingness to seek mental health services [31]. Adolescents living in low-income homes are at increased risk for personality disorders and depression and tend to engage in high-risk health behaviors and participate in delinquent behaviors [31, 34].

Race and Ethnicity

Although race is a social construct, US adolescents experience many racial and ethnic disparities in health and healthcare [35]. The empirical evidence suggests mental disorders disproportionally affect racial and ethnic minority youth. As previously mentioned, there are a number of ecological risk factors that impact mental disorders for all youth but in particular for racial and ethnic minority youth. A contributing factor to physical and mental health disparities in minority children may be the experiences of interpersonal and institutional racism [36, 37]. A study by Tobler et al. [37] examined the link between self-report of exposure to discrimination and its association with mental health among a sample of 2490 racial/ethnic minority adolescents primarily from low-income families. The researchers found 73% of participants reported they had experienced discrimination due to their race and/or ethnicity and 42% of those experiences were described to be somewhat disturbing or very disturbing. Findings revealed that adolescents who reported racism were more likely to exhibit aggressive behaviors, report suicide ideation, delinquency, and engage in high-risk sexual behaviors [37]. These findings also were described in a recent systemic review of the literature base (see [38]).

Due to often-reported risk factors, it is critical to engage racial and ethnic minority youth in mental health prevention and intervention strategies. However, racial and ethnic minority adolescents—like other cultural minority groups—experience disparities in access, utilization, and quality of mental health services compared to non-Hispanic White adolescents [24, 39, 40]. Racial and ethnic minorities utilize mental health services less frequently, and Black American youth are also less likely to utilize school-based and inpatient/residential mental health services than White youth [40–42]. A number of logistical barriers may influence this disparity including costs of treatment, insurance limitations, availability of treatment, and location of treatment [43]. In addition, there may be stigma-related barriers to obtaining

mental health services, particularly among Hispanic and Latino families [44]. Beyond access to and utilization of mental health services, additional challenges arise from a lack of culturally competent mental health services that address adolescent needs in the context of their culture and community [45]. There is no doubt that culture influences how adolescents understand and express emotions and behaviors. Mental health practitioners who lack cultural competency and cultural humility may result in poor patient-provider communication, misunderstanding, and misdiagnosis [46, 47].

Immigrant and Refugee Populations

In the United States, new immigrant populations have unique risk factors and mental health needs. Child and adolescent refugees suffer significant conflict-related exposures [48]. Detention in refugee camps and illegal immigration increase the risk of exposure to stressors such as violence and prolonged separation from parents and caregivers [49]. Upon resettlement, in the US many individuals from these populations experience great stress related to acculturation and separation from homeland, family, and friends [48]. As a result, immigrant children often experience significant mental health symptoms and disorders: anxiety disorders, mood disorders, and posttraumatic stress disorders [49]. Like other racial, ethnic, and cultural groups, refugee and immigrant populations often underutilize mental health services due to perceived and real limited access to services and resources, stigma, low priority compared to other immediate needs, and the ability to pay [48]. Additional barriers to culturally competent care exist within the health care system. Patient navigation and linguistic and cultural understanding between patients and providers pose additional challenges [48, 49].

LGBTQQI

While adolescence is a challenging life stage for all, those who identify as lesbian, gay, bisexual, transgender, queer, questioning, or intersex (LGBTQQI) might face unique burdens of social stigma, bullying, and discrimination related to sexual orientation and gender identity [50, 51]. Thus, this population may experience additional psychological stress. Sexual minority youth also experience disproportionate victimization and exposure to adverse childhood experiences [52, 53]. As a result, they are more likely to experience psychological distress than their heterosexual counterparts [54–58]. LGBTQQI adolescents are at greater risk for poor physical and mental health and experience higher rates of depression, anxiety, conduct disorders, suicide ideation and attempts, and substance abuse or dependence [57, 59–62]. Despite the growing evidence of mental health disparities in this population, more

research is needed into the health of sexual minorities, including adolescents [57, 63].

In addition to the increased risk for poor mental health in these populations, there may be additional barriers to accessing quality mental health services. Providers may be reluctant to ask about sexual orientation and gender identity, while patients can experience discomfort and fear in discussing these topics with healthcare providers [57]. Many healthcare providers lack training and understanding about the cultural and health needs of sexual minority patients and clients, which may lead to less than optimal care for LGBTQQI adolescents [57, 64]. Primary care for all adolescents should include periodic, private, and confidential discussions on a range of health issues, including sexuality and sex [64, 65].

Prevalent Mental Health Disorders in Adolescent Populations

Mental health disorders are common in adolescent populations [66]. A Centers of Disease and Prevention (CDC) review of data systems between 2013–2019 recognized the high prevalence of diagnosable mental health diseases in a younger population of 3–17 years old [66]. During the time frame, one-fifth of children in this age group had ever experienced depressive symptoms. In 2019, almost 38% of high school students experienced sadness or hopelessness, with nearly 19% seriously considering suicide [66]. The researchers reported that one in four children between the ages of 12 to 17 years had received mental health services the previous year [66]. Using data from the National Comorbidity Survey Replication Adolescent Supplement (NCS-AS) Kessler and colleagues reported the prevalence of any DSM-IV disorder in US adolescents aged 13–18 to be approximately 40% [67]. This is consistent with another study that found an estimated 46% lifetime prevalence of any mental health disorder in this age group [68]. An age gradient of risk was noted with 14–18-year olds estimated to have a 42% risk while older teens, ages 17–18 years, were found to have an approximate 54% risk of lifetime mental health illness prevalence [68]. Even more startling, lifetime prevalence of a severe mental health disorder was found to be approximately 20% or 1 in 5 children between the ages of 13 and 18 years of age [68]. Taken together, these studies point toward the high prevalence rates of mental disorders among youth in the United States.

Common disorders include both internalizing and externalizing disorders, substance abuse, and eating disorders [66–68]. In the NCS-AS study of middle and late adolescents, *anxiety disorders* were the most common diagnosis accounting for about 25–32% of mental health disorders. Within the category of anxiety disorders, *specific phobia* was the most prevalent disorder and accounted for 16–19% of the diagnoses. Despite the cause of anxiety, females account for higher lifetime rates than males. *Behavior disorders* represented the second most common type of condition at 16–19% with subcategory rates of *oppositional defiant disorder* and *attention deficit/hyperactivity* disorder (ADHD) near 8–13% and 6–9%, respectively.

Behavior disorders were more common in males compared to their female counterparts. This was closely followed by *mood disorders* with 10% to over 14% lifetime prevalence rates. Of these youth, anywhere from 8% to almost 12% were identified as having a *major depressive disorder* with almost 9% with severe disease in one study. As with anxiety disorders, mood disorders are more common in females. Additionally, the prevalence of mood disorders increases in older adolescents. Another DSM-IV disorder commonly seen in middle and late adolescents is *substance use disorders*, which were reported to range from 8% to 11% of adolescents. Lifetime prevalence rates of adolescents diagnosed with drug abuse/dependence and alcohol abuse/dependence ranged from 5% to 9%. Eating disorders affected almost 3% of adolescents. As expected these disorders (mood, anxiety, and eating disorders) increased with age and were more prevalent in females than males [68], although only a few differences were noted in regard to race and ethnicity [68]. A diagnosis of anxiety was higher among non-Hispanic Black youth compared to non-Hispanic White adolescents. Additionally, rates of mood disorders were reported more frequently for Hispanic youth than non-Hispanic youth [68]. Adolescents who belong to these cultural groups—separately and in combination—represent a vulnerable population who often fail to receive or seek out mental health services.

Adolescent Population: Under Diagnosed and Undertreated

Despite the high prevalence of mental health disorders among adolescents, there are significant barriers to culturally effective mental health services. Considering a socio-ecological perspective, the interaction of intrapersonal, interpersonal, organizational, community, and policy factors all affect mental health status, assessment, diagnosis, and treatment outcomes for adolescent populations all must be considered [5, 69]. Principally, there are many challenges in accessing adolescent mental health services. According to the National Survey of Children's Health, nearly half of *all* US adolescents lack a medical home [70] and for adolescents with mental health conditions, the rates for having a medical home are even lower [70]. Nationally, there is a shortage of providers to meet the needs of youth with mental health symptoms, and diagnoses, with even more pronounced shortages in rural and low-income communities [71]. In addition, access to adolescent mental health services varies greatly across the US as services are often dependent on state-level policies and healthcare market characteristics [72]. Thus, culturally relevant mental health services for adolescents are impacted by societal and community, familial, and individual factors.

Community-level factors such as neighborhood, socioeconomic status, social cohesion, exposure to violence, and perceived control may influence the mental health of adolescent residents [27, 73]. Butler et al. [74] found living in a neighborhood with poor physical qualities and low social support to be associated with higher odds of anxiety, depression, ADHD, and behavioral problems in adolescents, even when controlling for other neighborhood conditions, sociodemographic

factors, and parental mental health. The implications of neighborhood poverty cannot be overstated [75]. Research has shown that moving from a high-poverty to low-poverty neighborhood may lead to reductions in depressive/anxiety and dependency symptoms problems in youth [76].

Other contextual and environmental factors must be considered in understanding risk pathways to adolescent health. For example, schools play an important role in adolescent mental health. Teachers and those within the school system may be the first to recognize a potential mental health problem such as disruptive behaviors or psychological distress. In fact, an individual's level of school connectedness is a significant predictor of adolescent depressive symptoms [77] and suicidality. In one recent study, high levels of school connectedness were related to low levels of suicidality among a Black adolescent sample [78]. In addition to serving as a resource and a source of support, teachers and peers can contribute to the daily stress (discrimination and bullying) experienced by adolescents as they develop and become older adolescents and emerging adults [79]. Because adolescents spend a significant time in the school environment it is important to consider how this context and adults present in the school system can exacerbate or buffer mental health outcomes [80]. School-based mental health services offer the potential for prevention efforts as well as intervention strategies, although these services are inconsistently implemented throughout the US [81].

Primary care systems are relevant to mental health detection and treatment among adolescents. Racial, ethnic, and cultural minorities are more likely to receive their mental health care (if any) from a primary care physician than a specialty provider [82]. Primary care physicians are often the sole providers of commonly prescribed medications for mental health conditions and brief office-based counseling. Thus, primary care providers must be aware of how demographic factors (age, race, gender, sexual orientation, and religion) as well as other contextual factors influence the presentation of mental health symptoms. In a review of the literature, Kohn-Wood and Hooper [46] discussed the role culturally competent primary care providers may have in decreasing mental health disparities and increasing the utilization of health care providers for mental health services specifically.

Interpersonally, parents and guardians play a significant role in identifying emotional or behavioral problems and facilitating access to mental health services [83, 84]. Differences in family structures are also linked with differences in adolescent mental health outcomes [85]. Carlson [86] reported the importance of fathers in the lives of adolescents. Active father engagement was shown to decrease aggression and antisocial behavior in some adolescents as compared to peers with less father involvement. Feelings of anxiety, depression, and low self-esteem also were reported to decrease. A family history of mental health disorders also can be implicated in adolescent mental health conditions [87]. After a review of 76 studies van Santvoort et al. [87] concluded children of parents diagnosed with a mental illness are at increased risk for the development of a mental health disorder similar to their parents.

Adolescent Population: Culturally Responsive Pediatric Care

Mental health disparities have long been discussed and empirically supported, although solutions to reduce or ameliorate these disparities have been slow to emerge. Researchers have often asserted that the prevalence of mental disorders and expression of signs and symptoms are culture-specific [88], although mental health providers and others in healthcare often lack the ability to detect, diagnose, and treat mental health disorders in adolescents in general and in racially, ethnically, and culturally diverse adolescents in particular. This lack of recognition and detection of mental disorders maintains—in part—the long-reported mental health disparities described by David Satcher in the Surgeon General's Report [89]. The lack of equal and optimal treatment for *all* adolescents remains a significant mental health and societal burden that must be addressed.

With regard to treatment, the gold standard has been to use evidence-based practices to treat mental health disorders experienced by adolescents and adults. But it remains less clear if these evidence-based practices are culturally responsive and relevant to all individuals [6]. Some researchers contend that evidence-based practices may show efficacy (i.e., the treatment works in controlled clinical trials) but fail to show effectiveness (i.e., does the treatment work in the communities where they are being practiced and with the population with whom they are being used). The Substance and Mental Health Services Administration report on the hundreds of evidence-based programs available to providers and others in the healthcare field but many of those programs may not be ecologically valid (https://www.samhsa.gov/treatment https://www.samhsa.gov/nrepp). Consequently, the mental health burden and mental health disparities often seen in the adolescent population may not be reduced even when using evidence-based practices. Hall et al. [7] suggested that treatment practices and interventions that are culturally responsive are likely to be ecologically valid and likely to reduce health disparities. An ecological mental health treatment framework would consider unique community resources, the treatment context, the cultural norms of the population, and the barriers often evidenced in the population [6].

Mental health providers and others in the healthcare field must be knowledgeable about the unique developmental, cultural, and ecological factors that impinge upon adolescent mental health outcomes and importantly barriers to treatment (e.g., treatment utilization, stigma, discrimination, geography, and health suspiciousness about treatment providers and services). In addition to this vital knowledge, mental health providers and others in the healthcare field must be competent in infusing cultural considerations into adolescent pediatric mental health care (assessment, diagnosis, and treatment). In a recent meta-analysis of cultural adaptations of mental health interventions, Hall et al. [7] documented the benefit of reducing mental health symptomatology when culturally adapted interventions were used. This research, surprisingly, is in its infancy.

Other commonly purported factors that relate to culturally responsive pediatric care and possibly related to reducing health disparities are provider cultural and

linguistic competency [46, 90]. In fact, it is an ethical imperative that health providers and others in the healthcare field engage in training that facilitates cultural humility, cultural awareness, and specific knowledge and skills relevant to working with diverse adolescents and their families. In the context of office-based counseling, Cardemill and Battle [91] proffered several recommendations for providers working toward cultural competency. Their suggestions, which have transportability to all settings and most providers, include the following: (a) recognize and suspend preconceptions about patients' race, ethnicity, and other cultural identities and that of their family members, (b) recognize within differences among patients who self-identify similarly (i.e., patients may be quite different from other members of their own group), (c) consider how differences between the provider's race, ethnicity, and other cultural identities and patient's may impact the patient care process (assessment, diagnosis, and treatment), (d) recognize that discrimination, racism, power, and privilege may be implicated in the patient-provider interactions and behaviors, and (e) be prepared and willing to broach culturally related topics and their relevance to presenting issues with patients. Importantly, these recommendations may help reduce the stigma and other barriers evinced among racial, ethnic, and diverse individuals seeking services or who may terminate services prematurely.

For several decades, mental health providers and others in the healthcare field have made attempts to reduce mental health disparities with little to no success. The severe burden of undiagnosed and untreated mental health conditions among adolescents cannot be overstated. It is clear that more research is needed. More specifically, research is needed that clarifies how to successfully engage adolescents and their families in culturally responsive ways, and that elucidates what constitutes efficacious and effective ecologically valid and culturally adaptive assessment and treatment modalities for adolescent mental health conditions. Finally, as described earlier, healthcare organizational and structural "competence" are important as well. All of these dynamics are interlinked and have relevance for policy initiatives (i.e., Affordable Care Act), or potentially an alternative health system which will pave the way for more patients to receive needed services. This makes it even more essential that we have a health professional workforce who can bring different perspectives and be ready to rethink our strategies related to culturally adapted and responsive services and programs to assist in the battle against healthcare disparities. The individual (adolescent) and multiple contextual systems taken together must be considered if improvements in culturally competent pediatric care will be realized.

The most commonly used evidenced-based practices with adolescents often include cognitive behavioral therapy, interpersonal therapy, pharmacotherapy, and/or combination therapy. Although family systems therapy also is used it has less empirical support than cognitive behavioral therapy, interpersonal therapy, pharmacotherapy, and/or combination therapy. In addition, and importantly, few studies have been conducted to determine the efficacy and effectiveness of cultural adaptations of these most commonly used evidence-based treatments. Cultural adaptation has been defined as "the systematic modification of an evidence-based treatment or

intervention protocol to consider language, culture, and context in such a way that it is compatible with the client's cultural patterns, meanings, and values" [92]. Although it has been purported that cultural adaptations are critical for increased positive outcomes it remains less clear what ought to be adapted and the added benefits of adaptations [93]. Thus, oftentimes clinicians must use treatments among populations for whom they were not developed, evaluated, or tested. The following treatments are some of the most widely used mental health treatments for adolescents.

Cognitive Behavior Therapy

Cognitive Behavior Therapy (CBT) is a short-term, goal-oriented therapy derived from principles of both behavioral and cognitive psychology. CBT utilizes a problem-focused strategy to develop actionable strategies to mitigate behaviors. Although CBT has been shown to be effective across the lifespan, the adolescent period presents its own unique challenges. It is imperative that the therapist takes into account the "critical developmental tasks and milestones relevant to a particular adolescent's problems (i.e., pubertal development, cognitive development, the development of behavioral autonomy, and social perspective taking during adolescence"; [94], p. 420) Holmbeck and Sharpera [95] proposed a framework to be considered when using CBT in the adolescent population. At the center of this framework is the interpersonal context of the adolescent, which takes into account the guidance of family, peers, school, and work. Interpersonal contexts are directly influenced by the primary developmental changes (i.e., biological, psychological, and social) that are occurring during adolescence. In turn, developmental outcomes of autonomy, psychosocial adjustment, and contentment with intimacy and sexuality are pursued. Mitigating all of these factors are the demographic and interpersonal characteristics, including ethnicity, family structure, gender, neighborhood, and community factors as well as socioeconomic status [94, 95]. Utilizing this framework, CBT has been shown to be effective in the treatment of adolescents with depression, anxiety, obsessive compulsive disorders (OCD), posttraumatic stress disorder (PTSD), and self-harming behaviors [96–99].

Interpersonal Psychotherapy

Interpersonal psychotherapy (IPT) is based on the theory that interpersonal conflicts or transitions maintain psychological distress. In contrast to CBT, which focuses on dysfunctional belief systems, IPT focuses on dysfunctional intercommunication processes. In addition, IPT is directed toward improving adolescents' "social problem-solving skills to increase their personal effectiveness and satisfaction with current relationships" (SAMSHA, n.d.). Although IPT is often used when

adolescents present with depressive symptoms [100] it can be used for a range of mental health disorders, as well as when adolescents present with developmental issues, including discord with parents, peer relationships, problems with authority figures, and other intra- and interpersonal issues. Research shows that IPT has been culturally adapted for racially minority adolescents [101].

Family-Based Therapy

Family therapy focuses on improving the functioning of the family as a unit, or its subsystems, and/or the functioning of the individual members of the family When adolescents do access mental health services, parent and adolescent communication and interactions with providers may influence the accuracy of diagnosis, treatment plan, as well as patient compliance [83, 102]. Enhancing the communication between the different parties helps to build trust in the clinician's ability to treat the adolescent, which, in turn, provides an opportunity to develop a collaborative agreement concerning the treatment plan [102]. A collaborative approach to therapy reinforces adolescent coping skills when compliance may be hampered by known and unknown adverse effects of treatment [102]. In a review of the literature, Chovil [83] reported that utilization of the family engagement model has several benefits including advocacy on behalf of the adolescent resulting in better outcomes, increased accountability of services rendered, and providing treatment in a culturally sensitive manner. The family engagement model utilizes the ecological framework, which focuses on the family as a full partner in the care of their child. Families are empowered by building on their "strengths, capability, resiliency, and skill building…" to be actively involved in all levels of decision-making ([83], p. 9). Because many racial and ethnic minorities do not use mental health services, family engagement may not only increase service utilization but also increase effectiveness [103], although more research is needed. Other family models that have been used with culturally and racially diverse samples include structural-strategic family therapy, brief strategic family therapy, and multidimensional family therapy (see [93, 104]).

Psychopharmacology and Combination Therapy

Although medication can be beneficial for the treatment of mental health signs and symptoms and mental health disorders among adolescents, it may not always be the first-line treatment for many disorders and circumstances. In addition, many medication prescribing practices for mental health treatment in adolescents are informed by adult protocols [105]. It appears that select SSRIs (Fluoxetine and Paroxetine) and psychostimulants are the most frequently studied pharmacotherapies. Studies

that have utilized pharmacotherapy in conjunction with psychotherapy have yielded positive outcomes. "The preponderance of available evidence indicates that psychosocial treatments are safer than psychoactive medications" (American Psychological Association [APA], 2006, p. 16 [106]). Finally, it is also important to note less is known about how racial and cultural factors are implicated in medication efficacy, safety, and adherence [106, 107].

Intersection of Culturally Responsive Care and the Adolescent Population—Case Study

Sharon is a 40-year-old Black American, single, heterosexual woman who has contacted a primary care physician about her oldest daughter's recent change in behavior. Specifically, her 13-year-old daughter, Brenda, has been complaining about severe headaches and stomach pains.

The mother (Sharon) is very concerned about her daughter and does not know what to do. In addition to the somatic complaints, Brenda has been very angry and irritable and has been reluctant to get up in the morning to go to school for the past few months. Also concerning, Brenda who has been a straight-A student has earned all Cs in her classes this past quarter. Brenda reports she just does not have the energy or interest to go to school. Brenda is argumentative with everyone in the family and the principal recently contacted her mother after Brenda asked to go to the nurses' office three consecutive days. During the office visit her mother, grandmother, and 6-year-old sister present to the office because they are concerned about what has been going on with Brenda. When the nurse calls Brenda back for her visit she asked that everyone stay in the waiting room so that the doctor can visit with Brenda privately.

Brenda meets with the doctor and he asked about the course of her stomach pains and headaches. He also asks about her diet and sleep routine. He notes in her chart that her BMI places her in the 95th percentile. The doctor also orders a series of tests and schedules a follow-up appointment. When Brenda leaves the exam room her mother asks to see the doctor but the nurse mentions that the doctor has ordered several tests and until the tests come back he does not have any information to share. Sharon is upset because she has no additional information but the nurse refuses to get the doctor. Because the mother had to take off from work to bring Brenda to the office, she was hoping to learn what exactly is going on with her daughter before leaving the office.

In this case, the physician appropriately assessed what was going on with Brenda physically. In particular, he focused on her most severe complaints (stomach pain and headaches) and ordered tests to see if he could better determine if something serious is going on that would require additional assessments, referrals, or pharmacotherapy.

Developmentally and Culturally Responsive Considerations

Keeping in mind the heterogeneity among racial, ethnic, and cultural groups there are a few considerations that may illustrate a culturally appropriate response and way of being for this case. Brenda presented with some common problems evidenced among adolescents in general. First, irritability is a common symptom reported by adolescents as they have everyday experiences, form peer and eventually romantic relationships, and develop a level of comfort in their school and other systems. On the other hand, the research is robust on the increase in mood disturbances during puberty for female adolescents. In this case, it appears that there may be other things going on for which the physician would want to assess (e.g., mild depression or anxiety). The somatic symptoms, coupled with irritability, lethargy, and change in grades may point to something else going on other than physical complaints, pre-diabetes or migraines. Second, in this case, it would be important to consider the extent to which cultural factors could account for Brenda's change in grades and lack of interest in going to school (e.g., discrimination, bullying, and lack of support from teachers). The physical complaints could be related to mental, social, and environmental issues. Third, the physician could benefit from including the mother and grandmother in the assessment process to clarify what they attribute to Brenda's signs and symptoms. Including the mother and grandmother could aid in learning more about the history of Brenda's presenting issues, the family history related to mental health issues, and the cultural and treatment preferences of the family. Because Brenda and the family self-identify as Black American there could be specific culturally related elements that could enhance physician-patient communications in general and for this first encounter in particular. The research suggests that oftentimes racially minority patients feel unheard and misunderstood during patient care visits. A culturally tailored approach would consider the benefits versus the limitations (adolescent privacy and autonomy) of including the mother and grandmother in the examination room [9]. A demonstration of cultural humility as the physician tries to better understand what is going on with Brenda following test results, could facilitate the patient care process (i.e., accurate assessment, diagnosis, and treatment) and lessen the chance of misdiagnosis and undertreatment. Finally, including the mother and grandmother in the first patient encounter would allow for a better understanding of potential cultural barriers and cultural factors that may be implicated in the presenting issues and treatment adherence (e.g., socioeconomic status, transportation, insurance, and treatment preferences).

Resources

- Centers for Disease Control and Prevention: Children's Mental Health.
  See: https://www.cdc.gov/childrensmentalhealth/symptoms.html
- Office of Adolescent Health.
  See: https://www.hhs.gov/ash/oah/index.html

- Substance Abuse and Mental Health Services Administration (SAMHSA): Identifying Mental Health and Substance Problems of Children and Adolescents: A Guide for Child Serving Organizations.
  See: http://store.samhsa.gov/shin/content/SMA12-4700/SMA12-4700.pdf
- Society of Clinical Child & Adolescent Psychology: Effective child therapy.
  See: http://effectivechildtherapy.org/content/ebp-options-specific-disorders
- Society for Research and Child Development.
  See: https://www.srcd.org/
- Society for Research on Adolescence.
  See: https://www.s-r-a.org/
- Eunice Kennedy Shriver National Institute of Child Health and Human Development.
  See: https://www.nichd.nih.gov/

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V. Faye Jones, M.D., Ph.D., M.S.P.H. serves as the Associate Vice President for Health Affairs/Diversity Initiatives for the Health Science Center Campus and Vice Chair in the Department of Pediatrics at the University of Louisville School of Medicine. She has been in academia for 33 years and a practicing general pediatrician for 35 years.

Katie F. Leslie, Ph.D., M.S. is an Associate Professor in the Department of Pharmacy Practice and currently serves as Director of Enrollment and Community Outreach for Sullivan University College of Pharmacy and Health Sciences in Louisville, KY. Dr. Leslie was a former professional with the University of Louisville.

Lisa M. Hooper, Ph.D. is Professor and Richard O. Jacobson Endowed Chair and Director Center for Educational Transformation Research at the University of Northern Iowa Center for Educational Transformation. She formerly served as faculty at the University of Louisville in Louisville, KY.